

# A STUDY OF THE RETICULAR SUPPORTING NET-WORK IN MALIGNANT NEOPLASMS.

AS STAINED BY MALLORY'S METHOD.

BY

PAUL G. WOOLLEY, B.S., M.D. (J.H.U.),

Late Governors' Fellow in Pathology, McGill University.

*(From the J. H. R. Molson Laboratory of Pathology, McGill University.)*

Observations on the presence of several varieties of connective tissue in tumors have been recorded in well-known papers. Comparisons have been drawn between the distribution of the connective tissue in the sarcomata and carcinomata, but I believe that heretofore there has been no thorough comparative study of the finer supporting organization of all the types of malignant tumors—by which I mean, carcinomata, sarcomata and endotheliomata, which last type includes the peritheliomata.<sup>1</sup>

That such a study would be generally interesting was a foregone conclusion, but there was a possibility that it might be very useful in assisting to make diagnoses of the more obscure growths by a fairly rapid method and also establish the relations between the various types of new growths.

Mallory's method was chosen because fresh tissue is not always to be had and because I had found that the use of digestion methods was unsatisfactory in fixed specimens. This method is, beside, a particularly brilliant method of staining, for, not only the supporting tissues, but, in well-fixed specimens, the cells are clearly and brightly stained, allowing a more careful study of the relation of framework and cellular elements.

In using the method I have made a slight modification which I think brings out the colors somewhat better than the original method. This deviation is simply in the use of a drop of aniline oil on the section just after the alcohol, but the method I will give in detail.

Sections are cut from tissue hardened in Zenker's fluid and imbedded, preferably, in paraffin. These are fixed on slides in the usual way and then the paraffin is dissolved off and the slide immersed in absolute alcohol, 95 per cent. alcohol, 70 per cent. alcohol, then in water. They are then stained in a 1/10th per cent. aqueous acid fuchsin solution for from 2 to 3 minutes, then washed in water; a few drops of a 1 per cent. solution of phospho-molybdic acid is then